In the Claims:

Please rewrite claims 1 and 13, add new claims 19 and 20 as follows:

B1

1. (Twice Amended) A process for producing an intermetallic compound-based composite material comprising a reinforcing material and an intermetallic compound, comprising the steps of: mixing a metal powder with a reinforcing material to obtain a mixed powder, filling the mixed powder into a vessel, placing Al on an upper side of the mixed powder filled into the vessel, heating the Al and the mixed powder under reduced pressure to a temperature that is several tens of °C higher than the melting point of Al, and impregnating the mixed powder with an Al melt, wherein a spontaneous combustion reaction between the metal powder and the Al melt converts the Al melt into an aluminide intermetallic compound, and the Al melt and the metal powder are used respectively in such amounts that a mass ratio of a remaining Al after the spontaneous combustion reaction to the intermetallic compound-based composite material is within a range from 0:10 to 3:7.

B2

13. (Twice Amended) A process for producing an intermetallic compound-based composite material comprising a reinforcing material and an intermetallic compound, comprising the steps of: mixing a metal powder and an oxide powder reducible by Al with a reinforcing material to obtain a mixed powder, filling the mixed powder into a vessel, placing Al on an upper side of the mixed powder filled into the vessel, heating the Al and the mixed powder under reduced pressure to a temperature that is several tens of °C higher than the melting point of Al, and impregnating the mixed powder with an Al melt, wherein a spontaneous combustion reaction between the metal powder and the Al melt converts the Al melt into an aluminide intermetallic compound, and the Al, the metal powder and the oxide powder are used respectively in such amounts that a mass ratio of a remaining Al after the

B2 spontaneous combustion reaction to the intermetallic compound-based composite material is within a range from 0:10 to 3:7.

19. (New) A process for producing an intermetallic compound-based composite material

B3 according to claim 1, wherein said temperature is at least 700°C.

20. (New) A process for producing an intermetallic compound-based composite material according to claim 13, wherein said temperature is at least 700°C.